# Wetland and Water Quality Issues for Parks of the Northeastern US: A Scoping Report for the Coastal Barrier Network:

305b and 303d Waters

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**DRAFT** 

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#### 1

#### **INTRODUCTION**

The purpose of this scoping report is to identify threats to specific wetlands or wetland complexes within northeastern National Park Service (NPS) units and to establish how those threats are altering the structure and function of the wetlands or at least establish the potential for alteration, and then identify habitat restoration or other management scenarios aimed at protecting and enhancing wetland values for the long-term. This project will be conducted for the eight (8) units within the Coastal and Barrier Network, as well as two (2) units on the immediate coast, but within the Northeast Temperate Network. Thus, the following ten (10) NPS units are included: Acadia National Park, Assateague Island National Seashore, Boston Harbor Islands National Park Area, Cape Cod National Seashore, Colonial National Historical Park, Gateway National Recreation Area, George Washington Birthplace National Monument, Fire Island National Seashore, Sagamore Hill National Historic Site, and Thomas Stone National Historic Site.

This report is divided into three Sections. Each Section discusses specific attributes of wetlands or water quality issues within these NPS units. *Section I* provides a summary of available information on water quality from 305(b) Reports and 303(d) Lists. *Section III* provides a description of wetland types present within each park, including wetland areas statistics from available GIS data, and historical trends in wetlands. *Section III* provides a description of any ongoing inventory or monitoring programs related to park wetlands and water quality, a description and discussion of threats to wetlands, and specific recommendations for restoration, monitoring, management alternatives, and/or research needs.

# 305(b) REPORTS and 303(d) LISTS: AN OVERVIEW

An introduction to the Clean Water Act, the 305(b) Water Quality Reports, and 303(d) Impaired Waterbodies Lists is given to provide the reader with background information concerning the definition of attainment status for designated uses and associated water quality assessments of waterbodies. Since each state defines its own water quality standards, and therefore states vary in their assessment methodology, a brief discussion on the state-specific water quality assessment methodology is provided for states where the ten NPS units are located. Tables are then presented containing summary information from 305(B) Water Quality Reports and 303(d) Impaired Waterbodies Lists for waterbodies within or immediately adjacent to each park unit. Information for the 305(b) and 303(d) summary tables was obtained from the Environmental Protection Agency (EPA) Waters website http://www.epa.gov/waters/ which provides both 305(b) and 303(d) information, and state issued 305(b) Water Quality Reports and 303(d) Impaired Lists. For the majority of waterbodies the EPA Water Quality Inventory website (http://www.epa.gov/waters/305b/index.html) had the most current and complete information for 305(b) assessment and attainment status (whether or not the water quality for a specific waterbody was supporting its designated use). Information for 303(d) Impaired Waterbodies Lists was summarized from both the EPA Total Maximum Daily Load (TMDL) Reports (http://www.epa.gov/waters/tmdl/index.html) and state issued 303(d) Impaired Waters Lists (from individual state websites). Occasionally, the 303(d) Impaired Waterbodies Lists from the state websites were more current or more complete than the information found on the EPA website, in those cases the most current information was used.

# **Introduction to 305(b) Reports and 303(d) Lists**

The Clean Water Act, adopted by Congress in 1972, required that states, territories, and authorized tribes to develop water quality standards for the protection and restoration of waters within their jurisdictions. Section 305(b) of the Clean Water Act requires that states assess the health of their waters and the extent to which water quality standards are being met. To satisfy this requirement each state must submit a water quality inventory report, the 305(b) Water Quality Report, every two years to the EPA. This report provides descriptions of the water quality of all navigable waters within the state to the extent that these waters provide for the protection and propagation of a balanced population of shellfish, fish, and wildlife, and allow recreational activities. Each state must also determine the extend of pollutant discharge elimination required and the level of water quality required for the protection and propagation of a balanced population of shellfish, fish, and wildlife and allows for recreational activities. Each state will also provide estimates of environmental impacts, economic and social costs necessary to achieve these objectives, the economic and social benefits of such achievements, and an estimate of the date these achievements will be met. Finally, each state must describe the nature and extent of non-point source pollutants and recommendations as to the programs to control these sources, including an estimate of the costs of implementing these programs. The water quality report submitted by the state to the EPA is referred to as the 305(b) Water Quality Report and identifies the impairments, if existing, for waters within that state. Waters listed in the 305(b) report are referred to as 305(b) listed waters and can be found on the EPA's Water Quality Inventory Electronic 305(b) Report website (<a href="http://www.epa.gov/waters/305b/index.html">http://www.epa.gov/waters/305b/index.html</a>). This list includes the attainment status (whether or not the waterbody is supporting designated uses) for designated uses (*e.g.* aquatic life support, fish consumption, primary contact recreation) for specific waterbodies.

In addition to the 305(b) Water Quality Report, The Clean Water Act, Section 303(d), requires that states develop an Impaired Waterbodies List for waterbodies that do not meet the water quality standards that the states have set. States must establish priority ranking for these waters and develop Total Maximum Daily Load (TMDL) programs for these waters. A TMDL specifies the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and allocates pollutant loadings among point and non-point sources. The EPA must approve the TMDL (EPA 2002a). While TMDLs have been required by the Clean Water Act since 1972, not many states, territories, or authorized tribes have developed them until recently, a result of recent legal action against the EPA by citizens groups seeking the listing of waters and development of TMDLs. States, territories, or authorized tribes are required to submit their list of 303(d) waters in every even numbered year (referred to as the 2-year listing cycle). The 303(d) list is referred to as the 303(d) Impaired Waterbodies List and must be based on documented methodology that includes an evaluation of existing and readily available data. Waterbodies that have been identified as impaired and have a scheduled development for, or existing TMDL are then added to the 303(d) Impaired Waters List for that state. Waterbodies continue to be included on subsequent Impaired Waterbodies Lists until TMDLs are completed, applicable criteria are met, or the original basis for the listing is shown to be flawed.

There are several designated uses of water quality for which the states are required to monitor. Each designated use has a unique set of water quality criteria, set individually by each state that must be met for the designated use to be realized. In the 305(b) Water Quality Report, the state must identify the type of assessment (monitored or evaluated) that was used to make each designated support determination. Monitored assessments are based on data collected within the past 5 years. Evaluated assessments are based on qualitative information (if no monitoring data are available) or on monitoring data that are more than 5 years old (EPA 2000). If available, specific water quality, biological and physical data can be obtained from STORET (short for STOrage and RETrieval): <a href="http://www.epa.gov/STORET/index.html">http://www.epa.gov/STORET/index.html</a>

The 305(b) Designated Uses are as follows (EPA 2000):

Aquatic Life Support: The water body provides for suitable habitat for protection and propagation of desirable fish, shellfish, and other aquatic organisms.

Drinking Water Supply: The water body can supply safe drinking water with conventional treatment.

*Fish Consumption*: The water body supports fish free from contamination that could pose a significant human health risk to consumers.

Shellfish Harvesting: The water body supports a population of shellfish free from toxicants and pathogens that could pose a significant human health risk to consumers.

*Primary Contact Recreation – Swimming*: People can swim in the water body without risk of adverse human health effects (such as catching waterborne diseases from raw sewage contamination).

Secondary Contact Recreation: People can perform activities on the water (such as boating) without risk of adverse human health effects from incidental ingestion or contact with the water.

Agriculture: The water quality is suitable for irrigating fields or watering livestock.

Many states designate their waters for additional uses such as:

Ground Water Recharge: The surface water body plays a significant role in replenishing ground water; surface water supply and quality are adequate to protect existing or potential uses of ground water.

Wildlife Habitat: Water quality supports the water body's role in providing habitat and resources for land-based wildlife as well as aquatic life.

*Culture*: Water quality supports the water body's role in tribal culture and preserves the water body's religious, ceremonial, or subsistence significance.

Since each state sets its own water quality standards, the definition of attainment of the EPA Designated Use Support (*i.e.* fully supporting, fully supporting but threatened, partially supporting, not supporting, not assessed) is slightly different for each state.

Prior to 2002, data collection and interpretation efforts under the Clean Water Act were not always coordinated. The EPA is now recommending that states submit an Integrated Water Quality Monitoring and Assessment Report (EPA 2002b) to satisfy the requirements for both Section 305(b) and 303(d) of the Clean Water Act (EPA 2000). The Integrated Report will combine the non-regulatory requirements of the 305(b) Water Quality Report with the regulation driven (mandated TMDL development) 303(d) Impaired Waterbodies List. The EPA has established several basic categories for an Integrated List. Some states (e.g. Virginia) have added additional categories for greater specificity. For the majority of states discussed in this report, the EPA guidance for integrating the 305(b) and 303(d) information was issued to late to fully implement for the 2002 report and listing cycle. Future reports (after 2002) will fully integrate the 305(b) and 303(d) reports into one report. The categories for the Integrated List are listed below.

*Integrated Lists of Waters and Monitoring Schedules (EPA 2002b)* 

#### Definitions:

Assessment Unit: A waterbody whose attainment status is reported in the Integrated Report. An assessment unit must be named and located based on the National

- Hydrography Dataset and identified by their Hydrologic Unit Code (HUC) (Table 1).
- Water quality standard: A water quality standard defines the water quality goals of an assessment unit by designating the use or uses to be made of the assessment unit and by setting criteria, both numeric and narrative, necessary to protect the designated use(s).
- Water quality is attained: The water quality standard is attained when all designated uses and associated criteria are met as determined in accordance with a state's or territories assessment and listing methodology.
- Water quality standard is threatened: The water quality standard is being attained, but no attainment is predicted, in accordance with the state's or territory's assessment and listing methodology, by the time the next Integrated Report is due.
- Water quality standard is not attained (impaired): The water quality standard is not attained in accordance with a state's or territory's assessment and listing methodology.
- 1. Attaining the water quality standard and no use is threatened. Assessment Units should be listed in this category if there are data and information that meet the requirements of the state's or territory's assessment and listing methodology and support a determination that the water quality standard is attained and no use is threatened. States and territories should consider scheduling these Assessment Units for future monitoring to determine if the water quality standard continues to be attained.
- 2. Attaining some of the designated uses; no use is threatened; and insufficient or no data and information is available to determine if the remaining uses are attained or threatened. Assessment Units should be listed in this category if there are data and information which meet the requirements of the state's or territory's assessment and listing methodology to support a determination that some, but not all, uses are attained and none are threatened. Attainment status of the remaining uses is unknown because there is insufficient or no data or information. Monitoring should be scheduled for these Assessment Units to determine if the uses previously found to be in attainment remain in attainment, and to determine the attainment status of those uses for which data and information were previously insufficient to make a determination.
- 3. Insufficient or no data and information to determine if any designated use is attained. Assessment Units should be listed in this category where the data or information to support an attainment determination for any use are not available, consistent with the requirements of the state's or territory's assessment and listing methodology. To assess the attainment status of these Assessment Units, the state or territory should obtain supplementary data and information, or schedule monitoring as needed.

Table 1. Hydrologic Unit Codes (HUC) for watersheds within the boundaries of NPS units in the Coastal and Barrier Network, Acadia NP, and Boston Harbor Islands National Park Area. HUC codes can be found at he EPA Surf Your Watershed website: <a href="http://cfpub.epa.gov/surf/locate/map2.cfm">http://cfpub.epa.gov/surf/locate/map2.cfm</a>.

NPS Unit	State	Watershed	HUC
ACAD	Maine	Maine Coastal	01050002
ASIS	Maryland	Chincoteague	02060010
ASIS	Virginia	Chincoteague	02060010
BOHA	Massachusetts	Charles	01090001
CACO	Massaschusetts	Cape Cod	01090002
COLO	Virginia	Lower James	02080206
COLO	Virginia	York	02080107
FIIS	New York	Southern Long Island	02030202
GATE	New York	Southern Long Island	02030202
GATE	New Jersey	Sandy Hook-Staten Island	02030104
GEWA	Maryland	Lower Potomac	02070011
GEWA	Virginia	Lower Potomac	02070011
SAHI	New York	Northern Long Island	02030201
THST	Maryland	Lower Potomac	02070011

- 4. Impaired or threatened for one or more designated uses but does not require the development of a TMDL.
- A. *TMDL has been completed*. Assessment Units should be listed in this subcategory once all TMDL(s) have been developed and approved by EPA that, when implemented, are expected to result in full attainment of the standard. Where more than one pollutant is associated with the impairment of an Assessment Unit, the Assessment Unit will remain in Category 5 until all TMDLs for each pollutant have been completed and approved by EPA. Monitoring should be scheduled for these Assessment Units to verify that the water quality standard is met when the water quality management actions needed to achieve all TMDLs are implemented.
- B. Other pollution control requirements are reasonably expected to result in the attainment of water quality standard in the future. Consistent with the regulation under 130.7(b)(i), (ii), and (iii), Assessment Units should be listed in this subcategory where other pollution control requirements are stringent enough to implement any water quality standard (WQS) applicable to such waters. EPA expects that these requirements must be specifically applicable to the particular water quality problem. Monitoring should be scheduled for the Assessment Units to verify that the water quality standard is attained as expected.

- C. *Impairment is not caused by a pollutant*. Assessment Units should be listed in this subcategory if the impairment is not caused by a pollutant. States and territories should consider scheduling these Assessment Units for monitoring to confirm that there continues to be no pollutant-caused impairment and to support water quality management actions necessary to address the cause(s) of the impairment.
- 5. The water quality standard is not attained. The Assessment Unit is impaired or threatened for one or more designated uses by a pollutant(s), and requires a TMDL. This category constitutes the Section 303(d) list of waters impaired or threatened by a pollutant(s) for which one or more TMDL(s) are needed. An Assessment Unit should be listed in this category if it is determined, in accordance with the state's or territory's assessment and listing methodology, that a pollutant has caused, is suspected of causing, or is projected to cause an impairment. Where more than one pollutant is associated with the impairment of a single Assessment Unit, the Assessment Unit will remain in Category 5 until TMDLs for all pollutants have been completed and approved by EPA.

In previous years, when a waterbody was removed from the 303(d) Impaired Waterbodies List (*e.g.* after a TMDL was approved) it was no longer tracked. Under the new integrated methodology, a waterbody which is removed from Category 5 remains on the integrated List in one of the other four categories.

# MAINE WATER QUALITY ASSESSMENT

The NPS unit within the state of Maine is Acadia National Park. The Maine Department of Environmental Protection (ME-DEP) has complied the 2002 Integrated Water Quality Monitoring and Assessment Report that integrates 305(b) and 303(d) information for the 2002 listing cycle (ME-DEP 2002a). Information found in this report is more complete than that found on the EPA WATERS website (<a href="http://www.epa.gov/waters/">http://www.epa.gov/waters/</a>). The 2002 integrated report (ME-DEP 2002a) established five new assessment categories, and as such, information on attainment assessment in the integrated report may not be comparable to previous 305(b) and 303(d) lists. Specifically, impaired waters are now subdivided into Categories 4 and 5. Maine has further subdivided the integrated list Categories 4-B and 5. Detailed information on these categories can be found in ME-DEP (2002a).

- Category 4B-1 includes waterbodies where enforceable controls have reasonable expectation of attaining standards, but where no new data are available to determine that attainment has been achieved.
- Category 4B-2 includes waterbodies with combined sewer overflows (CSO) and with current CSO Master Plans which include assurances that water quality standards will be attained.
- Category 5-A includes waterbodies where the impairment is caused by pollutants (other than those listed in 5-B through 5-D) and a TMDL is required.
- Category 5-B includes waterbodies where the impairment is caused solely by bacteria contamination.

- Category 5-C includes waterbodies where the impairment is caused by atmospheric deposition (all freshwaters are listed as 5-C for fish consumption advisory due to mercury contamination and are also listed under one of the other categories).
- Category 5-D includes waterbodies that are impaired by a "legacy" pollutant such as PCBs, DDT, or other substances already banned from production or use and are impaired by contaminated sediments where there is no additional extrinsic loading. All coastal waters are listed as 5-D for fish consumption advisory for lobster tomalley.

The Maine DEP uses a five year rotation schedule for monitoring rivers and streams (ME-DEP 2002a). In addition the state regularly conducts river-scale water quality monitoring to develop and update water quality models. The majority of lake monitoring is conducted by individuals, regional entities, or local organizations through the Volunteer Lake Monitoring Program (VLMP) (ME-DEP 2002a). Lakes that are attaining all or most of their standards are visited once every 5 years during August (August 10<sup>th</sup> through August 15<sup>th</sup>). Lakes that are in non-attainment and in the process of TMDL development are generally monitored by the State or cooperators more intensely such as twice a month during the ice-free season. Lakes that have completed TMDLs (Category 4A) or that are Category 3 Watch List are often monitored once a month during the summer season by the State or cooperators. Other lakes in Category 3 are monitored less frequently because the risk of non-attainment has decreased such as through the removal of discharge. Marine waters and estuaries are scheduled to be monitored on a three year rotation schedule. However, the Department of Marine Resources (DMR) provides the majority of monitoring on Category 3 waters and a schedule for DMR monitoring is not available at this time (ME-DEP 2002a).

State designated uses and attainment status for Maine waterbodies are described below (ME-DEP 2002a & 2002b). The state has designated one standard (GPA) for the classification of freshwater great ponds and natural lakes less than 10 acres in size. Class GPA waters are described by their trophic state (based on chlorophyll *a*, Secchi disk transparency, total phosphorus content and other appropriate criteria). Riverine waters are classified as AA, A, B, or C. Estuarine and marine waters are designated into one of 3 classes (SA, SB, and SC). Each of these classes is managed for designated uses and has dissolved oxygen, bacteria, and aquatic life standards.

Class GPA waters (freshwater): Great ponds and lakes less than 10 acres in size. These waters are suitable for the designated uses of drinking water after treatment, recreation in and on, fishing, industrial processes and cooling water supply, hydroelectric power generation and navigation, and as a habitat for fish and other aquatic life. There may be no direct discharge of pollutants, and the habitat must be characterized as natural.

Class AA waters (riverine): This is the highest classification and shall be applied to waters which are outstanding natural resources and which should be preserved because of their ecological, social, scenic or recreational importance. These

waters are classified for drinking water supply, recreation in and on, fishing, navigation and a natural and free flowing habitat for fish and other aquatic life.

- Class A waters (riverine): These waters are classified for drinking water supply, recreation in and on, fishing, industrial process and cooling water supply, hydroelectric power generation, navigation and a natural habitat for fish and other aquatic life.
- Class B waters (riverine): These waters are classified for drinking water supply, recreation in and on, fishing, industrial process and cooling water supply, hydroelectric power generation, navigation and an unimpaired habitat for fish and other aquatic life.
- Class C waters (riverine): These waters are classified for drinking water supply, recreation in and on, fishing, industrial process and cooling water supply, hydroelectric power generation, navigation and a habitat for fish and other aquatic life.
- Class SA waters (marine and estuarine): These waters are managed for high water quality with limited human interference allowed. No direct discharge of pollutants are allowed into Class SA waters. These waters are classified as outstanding natural resources and which should be preserved because of their ecological, social, scenic, economic or recreational importance.
- Class SB waters (marine and estuarine): These waters are general purpose waters and are managed to attain good water quality. Well-treated discharges of pollutants that have ample dilution are allowed.
- Class SC waters (marine and estuarine): These waters are managed for the lowest water quality but must be fishable and swimmable and maintain the structure and function of the biological community. Well-treated discharges of pollutants are allowed.

# Class GPA designated uses:

# Aquatic Life Support:

Attainment: Lakes exhibiting stable or improving trends in trophic state.

*Non-attainment*: Lakes that experience extreme water level fluctuations or severe turbidity.

#### Fish Consumption:

Attainment: No fish consumption advisories in effect.

*Non-attainment*: "Restricted Consumption" fish advisory or ban in effect during the reporting period for the general population or a subpopulation (*e.g.* pregnant women, children). All Maine lakes are considered as Partially Supporting fish consumption due to mercury contamination.

# Recreation In/On (swimming):

Attainment: Lakes that do not exhibit regular, nuisance algal blooms during the summer (high use) period.

*Non-attainment*: Lakes in which swimming is chronically (more than 5 of the past 10 years) impaired during part of the recreation season due to culturally induced nuisance algal blooms.

# Drinking Water Supply:

Attainment: Lakes for which data suggest that the water is suitable for drinking after reasonable treatment.

*Non-attainment*: Lakes designated as a water supply, for which data suggest that the water is no longer suitable for drinking with reasonable treatment.

# Class SA, SB, SC designated uses:

Shellfish Propagation and Harvest of Shellfish: Shellfish areas are classified as approved for harvesting (supporting), conditional or restricted under a designated set of environmental conditions (partially supporting), or prohibited (not supporting).

Recreation in and on the Water: There is limited monitoring of Maine beaches.

Fishing: A human health consumption advisory has existed since 1992 coast wide against the consumption of lobster tomalley. This advisory was expanded to include bluefish and striped bass in 1996. The entire Maine coast is in partial support of its designated use due to these consumption advisories.

Marine Life Support: Information on dissolved oxygen and eutrophication are used to determine this assessment. Generally, data show oxygen levels along the Maine coast are adequate for the protection of aquatic life. Although some estuaries contain oxygen levels that do not meet the dissolved oxygen standards of their assigned classification, it was concluded that many of the levels measured were a result of natural processes.

Navigation, Hydropower, Industrial Supply, and Aquaculture: Aside from general provisions, there are no criteria for assessing these designated uses.

Maine water quality attainment definitions (ME-DEP 1996)

Fully supporting: Water quality meets all designated use criteria.

Threatened: Water quality supports beneficial uses now but may not in the future unless action is taken.

Partially supporting: Water quality fails to meet designated use criteria at times.

Not Supporting: Water quality frequently fails to meet designated use criteria.

*Not Attainable*: The state has performed a use-attainability analysis and demonstrated that use support is not attainable due to biological, chemical, physical, or economic/social conditions.

# MARYLAND WATER QUALITY ASSESSMENT

NPS units within the state of Maryland are portions of Assateague Island National Seashore, portions of George Washington Birthplace National Monument (Lower Potomac River), and Thomas Stone National Historic Site.

In 2002, The Maryland Department of the Environment (MD-DE) submitted a draft integrated list of impaired waters (MD-DE 2002) and has published a 2000 305(b) Report (MD-DNR 2000). The 2002 List integrates both 305(b) and 303(d) information. The EPA WATERS website has both 305(b) and 303(d) information for Maryland, however much of this information is from the 1998 listing cycle and therefore the 2002 draft list of

impaired waters (MD-DE 2002) contains the most current information. The 2002 List (MD-DE 2002) is considered a transition list between prior lists [e.g. 1996 and 1998, the last time Maryland published a 303(d) list] since the EPA's guidance for integrating 305(b) and 303(d) information came late in the development process for Maryland's 2002 303(d) list. Future lists will be more integrated with Maryland's 305(b) report. The Maryland Department of Natural resources (MD-DNR) and the Maryland Department of the Environment are responsible for collecting and compiling 303(d) data. MD-DNR compiles the 305(b) report which summarizes water quality monitoring information.

A waterbody is considered impaired when it does not attain the designated uses (e.g.) assigned to it by Maryland law. Attainment is determined by field measured or projected values of various water quality parameters. Use support assessment was based on either site-specific data monitored at least monthly (monitored) or on older (more than 5-years) information about uses data (evaluated). Waterbodies and reaches with no recent and readily accessible data are listed as "unknown" (MD-DNR 2000). Maryland surveys surface waterbodies on a 5-year rotating basis, with about one fifth of the State intensively sampled for water quality monitoring, pollutant source assessment, and collection of other parameters to support TMDL modeling every year. Therefore complete coverage of the State will occur in a 5-year cycle. Maryland's water monitoring program can be categorized into three general categories (MD-DNR 2000):

- 1. Long-term ambient monitoring programs: fixed station, long-term (initiated in the 1970's) programs sampling on a regular basis (water quality, benthic macroinvertebrate, fish tissue, phytoplankton, zooplankton, and shellfish monitoring)
- 2. Short-term intensive monitoring: special studies in which a number of samples may be collected in a small section of a particular waterbody or with a high sampling frequency in an effort to determine the cause of a water quality problem or for modeling studies.
- 3. Estuarine monitoring: a suite of monitoring programs (water and sediment chemistry, plankton and benthic macroinvertebrate sampling and sediment-nutrient flux sampling, nutrient limitation) initiated as part of the State's Chesapeake Bay Program in 1984 or the planned Coastal Bays Monitoring Program.

Maryland's basic use designation is referred to as Use I and is equivalent to the national goal "which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water". Waters which support higher or more specific uses (shellfish harvesting, trout waters, and drinking water) are classified as Use II, III, or IV, and potable waters are designated by a "P" after the use designation.

- Use I: Water contact recreation, fishing, propagation of fish, other aquatic life, and wildlife, and agricultural and industrial water supply and Use I-P: drinking water supply
- *Use II*: Shellfish harvesting. Areas are classified as either: *Approved*: Shellfishing is allowed

*Restricted*: Area is closed to shellfishing. Restricted areas are also established around municipal treatment plant outfalls and marinas.

Conditionally Approved: Area meets bacterial requirements at most times, but is closed to harvesting for a short period following one or more inches of rain within a 24-hour period.

Use III: Natural trout waters (naturally reproducing trout can live and propagate) and Use III-P: drinking water supply

Use IV: Recreational trout waters and Use IV-P: drinking water

Specific water quality criteria for each of the above designated uses can be found in Maryland's 2000 305(b) Report (MD-DNR 2000).

Use support is defined as the following (MD-DNR 2000):

Fully Supporting: Water quality conditions are "good" and water quality meets designated use criteria. For overall use support, (where there is more than one use) all designated used are fully supported.

Threatened: Water quality conditions are "good" and water quality supports designated uses now but may not in the future unless remedial action is taken. For overall use support, (where there is more than one use) one or more beneficial uses are threatened and the remaining uses are fully supported.

Partially Supporting: Water quality conditions are "fair" and, at times, water quality fails to meet designated use criteria or fails to a limited extent. For overall use support, (where there is more than one use) one or more designated uses are partially supported; remaining uses are fully supported or threatened.

Not Supporting: Water quality conditions are "poor" (impaired) and water quality frequently fails or by a large extent, fails to meet designated use criteria. For overall use support, (where there is more than one use) one or more designated uses are not supported. These waterbodies are considered *impaired*.

# MASSACHUSETTS WATER QUALITY ASSESSMENT

NPS units within the state of Massachusetts and included in this report are Boston Harbor Islands National Park Area and Cape Cod National Seashore.

In 2002, the Massachusetts Department of Environmental Protection (MA-DEP) compiled a report that integrates 305(b) and 303(d) information in the Massachusetts Year 2002 Integrated List of Waters (Commonwealth of Massachusetts 2002). Water quality reports for Boston Harbor (MA-DEP 2002a) and Cape Cod watershed (MA-DEP 2002b) are also available. These reports are more complete than what is available on the EPA WATERS website. The integrated list report (Commonwealth of Massachusetts 2002), lists waters by the individual categories as outlined by the EPA (2002b). However, Massachusetts has not classified any waters as Category 1 "waters attaining all designated uses" due to a statewide health advisory issued by the Massachusetts Public Health Department (MA-DPH 2001) pertaining to the consumption of finfish because of

suspected mercury contamination. This advisory precludes any waters from being in full support of the fish consumption use, including those that are currently "Not Assessed". Additionally, Massachusetts has not designated any waters as Category 4B "waters expected to attain all designated uses in the near future" because the state believe the guidance is not clear with respect to the time-frame in which the uses would need to be attained, but has generally been interpreted as meaning by the time the next integrated list is produced (Commonwealth of Massachusetts 2002).

Massachusetts classifies waters according to the Surface Water Quality Standards (SWQS) and assigns all inland, coastal, and marine waters to classes according to the intended use of those waters. These Classes are (MA-DEP 1996):

- Class A: Waters designated as a source of public water supply. To the extent compatible with its use they shall be an excellent habitat for fish, other aquatic life and wildlife, and suitable for primary and secondary contact recreation. These waters shall have excellent aesthetic value. These waters are designated for protection as Outstanding Resource Waters (ORWs).
- Class B: These waters are designated as habitat for fish, other aquatic life and wildlife, and suitable for primary and secondary contact recreation. Where designated they shall be suitable as a source of water supply with appropriate treatment. They shall be suitable for irrigation and other agricultural uses and for compatible industrial cooling and process uses. These waters shall have consistently good aesthetic value. These waters can be classified as Cold Water Fisheries or specifically designated as Warm Water Fisheries.
- Class SA: These waters are designated as an excellent habitat for fish, other aquatic life and wildlife and for primary and secondary recreation. In approved areas they shall be suitable for shellfish harvesting without depuration (Open Shellfishing Areas). These waters shall have excellent aesthetic value.
- Class SB: These waters are designated as habitat for fish, other aquatic life and wildlife and for primary and secondary recreation. In approved areas they shall be suitable for shellfish harvesting with depuration (Restricted Shellfishing Areas). These waters shall have consistently good aesthetic value.

Specific details on state designated uses and water quality standards that must be met to sustain those designated uses used can be found in the Boston Harbor 1999 Water Quality Assessment Report (MA-DEP 2002a). Designated uses include aquatic life, fish consumption, drinking water, primary contact recreation, secondary contact recreation, aesthetics, and agricultural and industrial. Each designated use is assessed as support, partial support, or non support. The term "threatened" is used when the use is fully supported but may not support the use within 2 years because of adverse pollution trends or anticipated sources of pollution. Not assessed indicates that there too little current data exist or there no reliable data are available. Not all waters are assessed, as many small and/or unnamed lakes, rivers, and estuaries are currently not assessed, and as such their status of designated uses has never been reported to the EPA in the Commonwealth's 305(b) Report.

The designation of Outstanding Resource Waters is applied to waters with exceptional socio-economical, recreational, ecological and/or aesthetic value (Rojko *et al.* 1995). These waters have more stringent requirements than other waters because the existing use is so exceptional that the perceived risk of harm is such that no lowering of the water quality is permissible (MA-DEP 2002b). These waters include all designated Class A Public Water Supplies, certified vernal pools, and may include surface waters found in Areas of Critical Concern, National Parks, State Parks, and State Forests and those protected by special legislation (MA-DEP 1993, MA-DEP 2002b)

# NEW JERSEY WATER QUALITY ASSESSMENT

The NPS unit within the state of New Jersey is Gateway National Recreation Area – Sandy Hook Unit.

In 2002 the NJ Department of Environmental Protection (NJ-DEP) submitted an Integrated Water Quality Monitoring and Assessment Methods Report (NJ 2002a) and a 2002 Integrated List of Waterbodies (NJ 2002b) under the guidance of EPA for integrating the 305(b) Water Quality Report with the 303(d) Impaired Waterbodies List. A detailed explanation for the assessment of water quality criteria for each parameter for New Jersey is given in the Integrated Water Quality Monitoring and Assessment Methods Report (NJ 2002a). Briefly discussed here are the basic data requirements for sample frequency and collection for some parameters. For conventional parameters (dissolved oxygen, pH, total phosphorus, total suspended solids, total dissolved solids, sulfate, temperature, chloride, and nitrate) the minimum sampling frequency is at least 10 samples, collected quarterly, over 2 years (recommended). If this requirement not met, then the assessment methodology is termed "estimated" (as opposed to "monitored") and at least 4 samples are required. The data must be the most recent 5 years of available data. For metals the minimum sampling frequency is at least 4 samples collected with 5 years and the data must be the most recent 5 years of available data.

Attainment of Surface Water Quality Standards (SWQS) for conventional parameters (dissolved oxygen, pH, total phosphorus, total suspended solids, total dissolved solids, sulfate, temperature, chloride, and nitrate) are based on the criteria listed below. Attainment criteria for other parameters (*e.g.* toxics, organics, metals) and designated uses (*e.g.* aquatic life designated use, recreational use, shellfishing, *etc.*) are not detailed herein since they are specific to each waterbody type (*e.g.* rivers, lakes, estuaries). Specific criteria can be found in the Integrated Water Quality Monitoring and Assessment Methods Report (NJ 2002a).

The New Jersey Department of Environmental Protection uses ten classifications for identifying water quality of the states' waters (NJ-DEP 2002):

FW1: Freshwaters that are preserved for posterity and are not subject to man-made wastewater discharges. Designated uses are: primary and secondary contact recreation; maintenance, migration, and propagation of the natural and established

biota; and any other reasonable uses. These waters are designated as Outstanding National Resource Waters.

FW2: Freshwaters. Designated uses are: maintenance, migration, and propagation of the natural and established biota; primary and secondary contact recreation; industrial and agricultural water supply; public potable water supply after conventional filtration treatment and disinfection; and any other reasonable uses.

FW2-TP: FW2 for trout production.

FW2-TM: FW2 for trout maintenance.

FW2-NT: FW2, non-trout.

- PL: Pinelands waters. Designated uses are: cranberry bog water supply and other agricultural uses; maintenance, migration, and propagation of the natural and established biota indigenous to this unique ecosystem; Public potable water supply after conventional filtration treatment and disinfection; primary and secondary contact recreation; and any other reasonable uses. These waters are designated as Outstanding National Resource Waters.
- SE1: Saline estuarine waters of estuaries. Designated uses are: Shellfish harvesting; maintenance, migration, and propagation of the natural and established biota; primary and secondary contact recreation; and any other reasonable uses.
- SE2: Saline estuarine waters of estuaries. Designated uses are: maintenance, migration, and propagation of the natural and established biota; migration of diadromous fish; maintenance of wildlife; secondary contact recreation; and any other reasonable uses.
- SE3: Saline estuarine waters of estuaries. Designated uses: secondary contact recreation; maintenance and migration of fish populations; migration of diadromous fish; maintenance of wildlife; and any other reasonable uses.
- SC: General surface water classification applied to saline coastal waters. Designated uses: shellfish harvesting; primary and secondary contact recreation; maintenance, migration, and propagation of the natural and established biota; and any other reasonable uses.

For parameters where the required number of samples is available (monitored):

Full Attainment: 10% or less of the samples exceed applicable SWQS or excursions due to natural conditions.

Non-Attainment: Threatened Waters: Less than 10% of samples exceed applicable SWQS, but declining water quality trends indicate that SWQS are likely to be exceeded in more than 10% of the samples in 2 years.

Non-Attainment: More than 10% of the samples exceed applicable SWQS

For parameters where the required number of samples is not available (estimated):

Full Attainment: 10% or less of the samples exceed applicable SWQS or excursions due to natural conditions with at least 8 samples.

Insufficient Data: 10% or less of the samples exceed applicable SWQS or excursions due to natural conditions with less than 8 samples or only one (1) sample exceeds applicable SWQS with less than 10 samples.

Non-Attainment: More than 10% of the samples exceed applicable SWQS and two (2) or more samples exceed applicable SWQS.

New Jersey has assigned categories to waterbodies using the EPA's Integrated List categories. However in 2002, New Jersey made some modifications to these categories. The state combined Category 1 (Waterbodies attain all water quality standards and support all designated uses; no waterbodies are classified as threatened) and Category 2 (Waterbodies are attaining some uses, no use is threatened; however, there is insufficient information available to determine if the remaining uses are attained or threatened) in New Jersey's Integrated Listing in the 2002 listing cycle (NJ 2002b). This was done because of limitations of data gathering efforts that prevented NJ-DEP from being able to fulfill the information requirements of List (Category) 1; specifically, the state was unable to assess all designated uses for all waterbodies due to insufficient data for total dissolved solids and heavy metals recorded under high flow conditions (largely due to extended drought conditions). Therefore List 2 (Category 2) was more representative of The combined list for Categories 1 and 2 represent New Jersey's assessment. waterbodies where one or more uses were in full support; other uses may not have been assessed, or there may not have been sufficient data to assess remaining uses. In contrast, waterbodies where there was insufficient data to make any attainment decisions were place on List 3 (Category 3).

# NEW YORK WATER QUALITY ASSESSMENT

NPS units within the state of New York are Fire Island National Seashore, Gateway National Recreation Area-Jamaica Bay Unit, and Sagamore Hill National Historic Site.

As of December 2002, the New York State Department of Environmental Quality (NYS-DEQ) had not submitted detailed electronic water quality assessment data in standard format to EPA. As a result the standard 305(b) information on Designated Use Impairments is not available through the EPA. The New York State Water Quality 2000 report (NYS-DEC 2000), submitted as required by Section 305(b) of the Clean Water Act, is available; however, detailed information on Designated Uses was not be available for all listed water bodies.

As summary of New York State's water quality classifications are listed below (NY-DEC 2000):

Class N fresh surface waters: Best uses are the enjoyment of water in its natural condition and, where compatible, as sources of water for drinking or culinary purposes, bathing, fishing, fish propagation, and recreation. No discharge of sewage, industrial wastes, or other wastes, waste effluents without filtration are allowed. These waters shall contain no deleterious substances, hydrocarbons or substances that would contribute to eutrophication, nor shall receive surface runoff containing any such substance.

Class AA-Special (AA-S) fresh surface waters: A source of water supply for drinking, culinary or food processing purposes; primary and secondary contact recreation;

- and fishing. These waters shall be suitable for fish propagation and survival. They shall contain no floating solids, settleable solids, oil, sludge deposits, toxic wastes, deleterious substances, colored or other wastes or heated liquids attributable to sewage, industrial wastes or other wastes. No discharge or disposal of sewage, industrial wastes or other wastes are allowed. They shall contain no phosphorus and nitrogen in amounts that will result in growths of algae, weeds and slimes that will impair the waters for the above uses.
- Class A-Special (A-S) fresh surface waters: A source of water supply for drinking, culinary or food processing purposes; primary and secondary contact recreation; and fishing. These waters shall be suitable for fish propagation and survival. This classification may be given to those international boundary waters that, if subjected to approved treatment, equal to coagulation, sedimentation, filtration and disinfection with additional treatment, if necessary, to reduce naturally present impurities, meet or will meet New York State Department of Health drinking water standards and are considered safe and satisfactory for drinking water purposes.
- Class AA fresh surface waters: A source of water supply for drinking, culinary or food processing purposes; primary and secondary contact recreation; and fishing. These waters shall be suitable for fish propagation and survival. This classification may be given to waters that, if subjected to approved disinfection treatment, with additional treatment necessary to remove naturally present impurities, meet or will meet New York State Department of Health drinking water standards and are considered safe and satisfactory for drinking water purposes.
- Class A fresh surface waters: A source of water supply for drinking, culinary or food processing purposes; primary and secondary contact recreation; and fishing. These waters shall be suitable for fish propagation and survival. This classification may be given to waters that, if subjected to approved treatment, equal to coagulation, sedimentation, filtration and disinfection, with additional treatment if necessary, to reduce naturally present impurities, meet or will meet New York State Department of Health drinking water standards and are considered safe and satisfactory for drinking water purposes.
- Class B fresh surface waters: Primary and secondary contact recreation and fishing. These waters shall be suitable for fish propagation and survival.
- Class C fresh surface waters: Fishing and shall be suitable for suitable for fish propagation and survival. Water quality shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes.
- Class D fresh surface waters: Fishing. Due to such natural conditions such as intermittency of flow, water conditions not conducive to propagation of game fishery, or stream bead conditions, the waters will not support fish propagation. They shall be suitable for fish survival. Water quality shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes.

- Class SA saline marine surface waters: Shellfishing for market purposes, primary and secondary contact recreation and fishing. These waters shall be suitable for fish propagation and survival.
- Class SB saline marine surface waters: Primary and secondary contact recreation and fishing. These waters shall be suitable for fish propagation and survival.
- Class SC saline marine surface waters: Fishing. These waters shall be suitable for fish propagation and survival. Water quality shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes.
- Class I saline marine surface waters: Secondary contact recreation and fishing. These waters shall be suitable for fish propagation and survival.

NYS-DEC ambient water quality monitoring is supported by the Rotating Intensive Basin Studies (RIBS) Program. The objectives of the RIBS Program include the overall assessment of water quality, including the documentation of good quality waters; long-term trend analyses of water quality; comprehensive, multiple parameter sampling; characterization of background conditions; and the establishment of baseline conditions for other site-specific water quality investigations (NYS-DEC 2000). The RIBS data is currently being processed and warehoused for eventual uploading to EPA's STORET data repository. The RIBS Program is compromised of three separate monitoring networks, each which operates concurrently, yet somewhat independently, and focuses on distinctly different objectives. The monitoring networks are:

- The Routine Network: This network provides continuous sampling (6 sampling annually) of water column chemistry at nineteen selected sites across New York state in order to monitor basin stream characteristics and determine long-term trends in water quality.
- The Intensive Network: This network employs more frequent water column sampling along with comprehensive, multiple parameter sampling (macroinvertebrates, fish, toxicity testing, bottom sediment chemistry) to provide more detailed assessments of water quality in selected drainage basins.
- The Biological Screening Network: This network relies upon biological indicators (macroinvertebrates) to provide a qualitative assessment of water quality at a large number of sampling sites in selected basins with minimal analytic expense.

Monitoring data from the state of New York are used to update the Waterbody Inventory/Priority Waterbodies List (WI/WPL). The WI/WPL is an inventory of waterbodies within New York that characterizes known and/or suspected water quality problems and issues, and tracks progress towards their resolution. It is from the WI/WPL that assessments that evaluate whether waters of the state support their designated uses and from which the 305(b) report is complied. The Waterbody Inventory is a list of water quality information for all waters within the state, while a subset of these waters with well documented, potentially resolvable, higher priority problems are listed in the Priority Waterbodies List (NYS-DEC 2000). The list of waterbodies to be included in the New York Section 303(d) List is drawn from the updated WI/PWL. Waterbodies on

the Waterbody Inventory are categorized into one of four Water Quality Assessment Categories (NYS-DEC 2000).

- 1. *Water Quality Impacted Segments*: Waterbody segments with documented use impairments with a problem severity of precluded, impaired, or stressed.
- 2. Threatened Waterbody Segments: Waterbody segments for which uses are not restricted and no water quality problems exist, but where specific land use or other changes in the surrounding watershed are known to, or strongly suspected of, threatening water quality. Also included in this category are waterbodies designated as Special Protection Waters, which experience no use restrictions or immediate threats to water quality, but remain highly valued resources deemed worthy of special protection and consideration.
- 3. Waterbody Impairments Needing Verification: Waterbody segments that are thought to have a use impairment or water quality impact, but there is not definitive or sufficient documentation.
- 4. Waterbodies Having No Known Impairment: Waterbody segments where monitoring efforts indicate there are no use impairments or other water quality impacts or issues.

Waterbodies in Categories 1 and 2 comprise the Priority Waterbodies List. Waterbodies in category 3 and 4 are tracked on the comprehensive Waterbody Inventory, but are not considered to be on the Priority Waterbodies List. The remaining waters of the state are recorded the Waterbody Inventory as Unassessed. Waters assessed as impaired (impacted) or threatened are evaluated for the appropriateness of TMDL development to address the impairment or threat. Once a TMDL has been developed for a water on the 303(d) List, the water becomes an *impaired or threatened water not requiring a TMDL*, and is, by definition, no longer included on the list, and is de-listed. Some waters assessed as impaired or threatened are not included on the 303(d) List because TMDL development is not the most appropriate response to the water quality issue. Impaired or threatened waters not requiring a TMDL generally fall into the one of the following categories:

- 1. *Impaired/Threatened waters where a TMDL is developed and being implemented*: Once a TMDL has been developed and approved, the waterbody is no longer included on the 303(d) List.
- 2. Impaired/Threatened waters where other controls are more suitable: For some water quality impairments or threats, actions other than TMDL development (e.g. correction of failing or inadequate treatment facilities, implementation of beast management practices, zoning restrictions, etc.) provide a more appropriate and effective response.

The assessment of New York waterbodies is based on the ability of the waters to support a range of designated uses. Those designated for the New York are Aquatic Life, Water Supply, Fish Consumption, Shellfishing Use, Public Boating, Recreations Use, and Aesthetics (more detailed information on designated used and assessment criteria can be

found in the NYS-DEC 2000 document). The severity of use impairment is categorized as one of four categories (NYS-DEC 2000):

- 1. *Precluded*: Frequent and/or persistent water quality, or quantity, conditions and/or associated habitat degradation prevents all aspects of the waterbody use.
- 2. *Impaired*: Occasional water quality, or quantity, conditions and/or habitat characteristics periodically prevent the use of the waterbody, or:
  - a. Waterbody uses are not precluded, but some aspects of the use are limited or restricted, or;
  - b. Waterbody uses are not precluded, but frequent/persistent water quality, or quantity, conditions and/or habitat associated habitat degradation discourages the use of the waterbody, or;
  - c. Support of the waterbody use requires additional/advanced measurements or treatment.
- 3. *Stressed*: Waterbody uses are not significantly limited or restricted, but occasional water quality, or quantity, conditions and/or associated habitat degradation periodically discourage the use of the waterbody.
- 4. *Threatened*: Water quality currently supports waterbody uses and the ecosystem exhibits no obvious signs of stress, however existing or changing land use patterns may result in restricted use or ecosystem disruption, or;
  - a. Monitoring data reveals increasing contamination or the presence of toxics below the level of concern, or;
  - b. Waterbody uses are not restricted and no water quality problems exist, but the waterbody is a highly valued resource deemed worthy of special protection and consideration.

The category "Waterbodies Having No Known Impairment" is equivalent to the USEPA Designated Use Support category of *Fully Supporting*.

# VIRGINIA WATER QUALITY ASSESSMENT

NPS units within the state of Virginia are portions of Assateague Island National Seashore, Colonial National Historical Park, and George Washington Birthplace National Monument.

The Virginia Department of Environmental Quality (VA-DEQ) has issued 305(b) (VA-DEQ 2002a) and 303(d) (VA-DEQ 2002b) reports in the year 2002. Virginia uses the EPAs 305(b) Designated Use Categories (EPA 2000). The degree of use for each Designated Use Category for each waterbody or waterbody segment was evaluated and placed into one of five categories, and the percent of the water body that is impaired for that use is estimated. The degree of use for Virginia's 305(b) listed waters are categorized as follows

Fully Supporting: Virginia Water Quality Standard is exceeded in less than or equal to 10% of the measurements taken over the reporting period.

Partially Supporting: Virginia Water Quality Standard is exceeded in 11% to 25% of the measurements taken over the reporting period with at least two exceedences.

*Threatened*: Fully supporting but the use has a medium or high probability for adverse conditions and is therefore considered threatened and is a "water of concern".

*Not Supporting*: Virginia Water Quality Standard is exceeded in more than 25% of the measurements taken over the reporting period with at least two exceedences.

Not Assessed: The water body has not been assessed for this designated use.

More detailed information on Virginia's assessment methodology can be found in Virginia's 2002 305(b) Water Quality Assessment Report (VA-DEQ 2002b).

Sampling collection and frequency for Virginia's water quality data varies from station to station. The number of stations representing a particular type of stream segment, the types of samples collected, the parameters analyzed, and the sampling frequency all vary depending on site conditions and program emphasis. All stations are monitored for conventional parameters (e.g. dissolved oxygen, pH, temperature, fecal coliform), about one third are monitored for toxics in the sediment, and a smaller number are monitored for toxics in the water column. Areas with potentially greater risk are sampled more frequently, as the risk decreases, the sampling frequency also decreases. Depending on the location water samples are collected either annually, semiannually, quarterly, or monthly. Sediment samples are collected either annually, semiannually, or quarterly (VADEQ 2002a). Station specific information for sampling dates, number of visits, and parameters analyzed can be found on the Virginia DEQ Water Quality Monitoring website: http://www.deq.state.va.us/water/monitoring.html

Virginia has begun the process of implementing the EPA's Integrated List system. The state has added two categories to the list, 4a "TMDL developed" and 2a "Waters of concern". Virginia is not using "Category 1" since it is the understanding of the state that waters included in this category must have sufficient data to make an assessment for every standard applicable at a monitoring station, and there are no stations in Virginia where every standard is available (VA-DEQ 2002b). In some cases there were slight discrepancies between the EPA listed reports and those listed by the State. In these cases the most conservative report (the one reporting an impairment) was used and is cited in the 305(b) or 303(d) table for that particular water body.

#### SUMMARY TABLES FOR EACH PARK

#### **Definition of Terms**

Summary information for 305(b) and 303(d) information for the ten (10) park units are provided in the following tables (Tables 2 to 11). Occasionally, a waterbody is listed multiple times in a table. This occurs either because multiple segments of the waterbody were individually listed giving more specific information or the waterbody identification

numbers (ID) were not similar between the EPA 305(b), EPA 303(d), and the state assigned waterbody ID. Since it was unclear whether the information was for the same waterbody, all listings are presented. Each of the summary tables provides the following information:

- **Waterbody**: the descriptive name of the waterbody, and occasionally a description of the specific reach or segment of the waterbody (particularly if the waterbody was large as in a major river).
- **Listing Cycle**: Provides the date(s) of the most current information for the 305(b) attainment of designated uses and/or 303(d) impaired water quality information. The majority of 303(b) information on attainment status was from the EPA, whereas the 303(d) information was the most current and complete of either the EPA TMDL Reports or the individual state 303(d) Impaired Waterbodies List.
- **305(b) Assessment Unit ID**: The identification number used by the EPA to identify a specific waterbody, reach or segment in the 305(b) Water Quality Inventory Reports. If 305(b) attainment information could not be located for a website waterbody is is indicated as "*Not listed*". This was the case for the states of New York and New Jersey since they have not yet submitted electronic 305(b) information to the EPA (and therefore it is not available on the EPA's water Quality and Inventory website) and no 305(b) specific waterbody attainment status could be found in their Water Quality Reports.
- **303(d) List ID or State segment ID:** The identification number used by the EPA and the state to identify a specific waterbody, reach, or segment in the 303(d) Impaired Waterbodies List. Usually, the 303(d) List ID from the EPA was the same as the state's listing ID in the state issued 303(d) Impaired Waterbodies List. However, there were instances where the state had more current or complete information for a specific waterbody's reach or segment and in that case the state's or segment's identification number is given and is indicated by the words (*State ID*, *segment ID*) under the identification number.
- **Integrated List Category and/or Class:** Some states (*e.g.* Maine, Massachusetts, New Jersey, and Virginia) have integrated the 305(b) and 303(d) reports into the Integrated Water Quality Monitoring and Assessment Report. Information on designated classes of waterbodies for some states (*e.g.* Maine, Massachusetts, New Jersey, and New York), if available, is listed.
- Water Quality Attainment Status for State Designated Uses & Impairment: This column provides a summary of 305(b) and 303(d) information. Waterbody attainment status [305(b) information] is indicated by the first headers (e.g. Fully Supporting, Partially Supporting, Not Assessed, Precluded etc.) for designated uses (e.g. aquatic life support, fish consumption, primary contact recreation). Information for attainment status for all designated uses was not available for all waterbodies, however, the most complete information is given. In some cases, particularly for waterbodies within New York and New Jersey, the attainment status for designated uses could not be found, presumably because these states have not yet submitted electronic data to the EPA and therefore it was not available on the EPA's water Quality and Inventory website or within the state's 305(b) Water Quality Report. The last two headers, Water Impairment and

**Source** are 303(d) information. **Water Impairment** lists the impairment of water quality responsible for the attainment status previously given. **Source** indicates the pollutant source (if known) for the listed water impairment. In some cases (*e.g.* New York, Virginia) the attainment status was given in the 303(d) Impaired Waterbodies List. For the state of Maine (ACAD National Park), there were little data available on the EPA Waters website [305(b) and 303(d)] in terms of attainment status, impairment, and sources. The majority of information was compiled from the 2002 Integrated Report (ME-DEP 2002). While this report included many waterbodies within the boundaries of ACAD, specific information of attainment of designated uses, impairments, and sources were not found. Therefore, for these waterbodies the integrated list category information is given instead.

Table 2. Water Quality Attainment Status for State Designated Uses [305(b) waters] and Impaired Waters [303(d) listed] for Acadia National Park. Information is a summary from EPA Water Quality Inventory 305(b), EPA TMDL 303(d) Reports, Maine 2002 Integrated Water Quality Monitoring and Assessment Report, and the Maine 303d List (ME-DEP 1998). If a 305(b) ID is not listed then the corresponding 305(b) report for that segment of the water body could not be found. Note: 305(b) water quality attainment information could not be found for these waterbodies. None of these water bodies had TMDL's reported to EPA by Maine. "na" indicates information could not be found.

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category & Class	Water Quality Attainment Status for State Designated Uses & Impairment
All Coastal Waters*	1998	na	ME9986_C	na	Fish consumption advisory Water Impairments: dioxin, mercury, PCBs Source: none listed
All Rivers and Lakes**	1998	na	ME9985_LR	na	Fish consumption advisory Water Impairments: mercury Source: none listed
Arey Cove, Winter Harbor	2002	714-18 (state ID)	na	3, SB	Insufficient data to determine attainment
Bar Harbor Ogden Pt to W side of Bald Porcupine Is to S side bar Is & directly E to Mt Desert Is.	2002	714-21 (state ID)	na	4-B2, SB	Combined sewer overflows with current master plans for abatement
Bar Harbor	2002	714-6 (state ID)	na	3, SB	Insufficient data to determine attainment
Bass Harbor & Eastern Duck Cove, Tremont	2002	707-6 (state ID)	ME-Area #42	5, SB	Non Attainment: Closed to shellfishing Water Impairments: bacteria, toxics Source: none listed
Bass Harbor Head, Tremont to Schoodic Pt,	2002	714 & 707 (state ID)	na	2, SB/SC	Attaining some uses, insufficient data for other use

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category & Class	Water Quality Attainment Status for State Designated Uses & Impairment
Winter Harbor					
Broad Cove & Somes Harbor, Mt Desert	2002	714-3 (state ID)	na	3, SB/SA	Insufficient data to determine attainment
					Non Attainment: Closed to shellfishing Water Impairments: bacteria Source: none listed
Frenchman's Bay	1998	na	ME-T1B0004	na	Note: Bar Harbor is under enforceable actions to develop and implement long term control plans for combined sewer overflows to meet water quality standards for bacteria
Grindstone Neck, Winter Harbor	2002	714-19 (state ID)	na	3, SB	Insufficient data to determine attainment
Long Pond, Mount Desert	na	na	na	na	Listed on previous 303d list but has been removed since current data indicate this water has attained water quality standards
Mt Desert coastal lakes	2002	na	na	2, GPA	Attaining some uses, insufficient data for other uses
Mt Desert coastal rivers- tributaries entering from Mt Desert and adjacent islands	2002	514R (state ID)	na	2, AA, A, B	Attaining some uses, insufficient data for other uses
Northwest Cove, Bar Harbor	na	na	na	na	Listed on previous 303d list but has been removed since current data indicate this water has attained water quality standard sand is open to shellfishing
Otter Cover, Bar Harbor	2002	714-5 (state ID)	na	3, SB/SA	Insufficient data to determine attainment
Salisbury Cove, Bar Harbor	2002	714-8 (state ID)	na	3, SB	Insufficient data to determine attainment
Schoodic Pt, Winter Harbor to Petit Manan Pt, Steuben	2002	706 (state ID)	na	2, SB	Attaining some uses, insufficient data for other uses

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category & Class	Water Quality Attainment Status for State Designated Uses & Impairment
Seal Harbor	2002	714-4 (state ID)	na	3, SB	Insufficient data to determine attainment
Southern Mt Desert Island & Cranberry Isles	2002	714-2 (state ID)	na	3, SB/SA	Insufficient data to determine attainment
Southwest Harbor	2002	714-1 (state ID)	na	3, SB	Insufficient data to determine attainment
Thomas Bay, Bar Harbor	2002	714-7 (state ID)	na	3, SB	Insufficient data to determine attainment
Tinker Brook, West Tremont	2002	707-11 (state ID)	na	3, SB	Insufficient data to determine attainment
Winter Harbor	2002	714-17 (state ID)	na	3, SB	Insufficient data to determine attainment

#### Fish consumption advisories:

Note: Frenchman's Bay (ME-T1B0004) and Bar Harbor (714-21) may be the same waterbody.

#### Website addresses:

EPA Water Quality Inventory 305(b) website: http://www.epa.gov/waters/305b/index.html

EPA TMDL 303(d) Reports: <a href="http://www.epa.gov/waters/tmdl/index.html">http://www.epa.gov/waters/tmdl/index.html</a>

Maine 303(d) List: <a href="http://www.state.me.us/dep/blwq/docmonitoring/impairedwaters/index.htm">http://www.state.me.us/dep/blwq/docmonitoring/impairedwaters/index.htm</a>

Maine 2002 Integrated Water Quality Monitoring and Assessment Report: <a href="http://www.state.me.us/dep/blwq/docmonitoring/305bappendix.pdf">http://www.state.me.us/dep/blwq/docmonitoring/305bappendix.pdf</a>

<sup>\*</sup> Maine has fish and shellfish consumption advisories for all marine waters for lobster tomalley, striped bass, and bluefish, therefore all marine waters are listed as Category 5-D due to this contamination problem. Due to the migratory nature of these organisms, it would be difficult to identify and quantify the source of the contaminants (dioxins, PCBs, mercury) that causes these advisories, therefore, it is technically infeasible to perform a TMDL analysis.

<sup>\*\*</sup> Maine currently has a fish consumption advisory for all freshwater due to the presence of elevated mercury levels in fish tissue, therefore all freshwaters were listed Category 5-C due to this contamination problem.

Table 3. Water Quality Attainment Status for State Designated Uses [305(b) waters] and Impaired Waters [303(d) listed] for Assateague Island National Seashore. Information is a summary from EPA Water Quality Inventory 305(b), EPA TMDL 303(d) Reports, Virginia Department of Environmental Quality 2002 303(d) Report, and Maryland's 2002 303(d) List. If a 305(b) ID is not listed then the corresponding 305(b) report for that segment of the water body could not be found. Note: 305(b) water quality attainment information could not be found for these waterbodies. None of these water bodies had TMDL's reported to EPA by Virginia. VDH: Virginia Department of Health. "na" indicates information could not be found.

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category	Water Quality Attainment Status for State Designated Uses & Impairment
Assateague Channel/Sheepshead Creek	1998	Not Listed	VAT-D01E_SF_B	na	Attainment status not found Water Impairments: VDH Shellfish restriction Source: Non-point source
Chincoteague Bay	1998	Not Listed	MD-02130106-E-11	na	Attainment status not found  Shellfishing: Portion of Bay (0.11 sq mi of Johnson Bay) is restricted due to fecal coliform from nonpoint runoff  Water Impairments: nutrients, dissolved oxygen, fecal coliform  Source: Non-point and natural sources
Sinepuxent Bay	1998	2000	MD-02130104-E-11	na	Attainment status not found  Shellfishing: Portion of Bay (<0.01 sq mi) is restricted due to wastewater discharge safety zone (not a water impairment)  Water Impairments: nutrients, dissolved oxygen, fecal coliform  Source: Non-point source
Tom's Cove	1998	Not Listed	VAT-D01E_SF_K	na	Attainment status not found Water Impairments: VDH Shellfish restriction Source: Non-point source

Website addresses:

EPA Water Quality Inventory 305(b) website: <a href="http://www.epa.gov/waters/305b/index.html">http://www.epa.gov/waters/305b/index.html</a>

EPA TMDL 303(d) Reports: http://www.epa.gov/waters/tmdl/index.html

Virginia Department of Environmental Quality 2002 303(d) Report: <a href="http://www.deq.state.va.us/water/303d.html">http://www.deq.state.va.us/water/303d.html</a>

Maryland's 2002 303(d) List: http://www.mde.state.md.us/Programs/WaterPrograms/TMDL/Maryland%20303%20dlist/index.asp

Maryland's 2000 305(b) Report: http://dnrweb.dnr.state.md.us/download/bays/MD2000\_305b.pdf

Table 4. Water Quality Attainment Status for State Designated Uses [305(b) waters] and Impaired Waters [303(d) listed] for Boston Harbor Islands National Park Area. Information is a summary from EPA Water Quality Inventory 305(b), EPA TMDL 303(d) Reports, the Boston Harbor 1999 Water Quality Assessment Report (MA-DEP 2002a) (most current information), and the Massachusetts Year 2002 Integrated List of Waters (Commonwealth of Massachusetts 2002) (most current information). None of these water bodies had TMDL's reported to EPA by Massachusetts.

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category & Class	Water Quality Attainment Status for State Designated Uses & Impairment
Boston Harbor (includes President Roads and Nantasket Roads)	2002	MA70-01_00	MA70-01	5, SB	Fish consumption advisory Supports: aquatic life use, primary contact recreation, secondary contact recreation, aesthetics Non-Support: fish consumption Water Impairment: priority organics, pathogens, Source: unknown
Dorchester Bay (mouth of Neponset River to Head Is & N Thompson Is to Chapel Rocks)	2002	MA70-03_00	MA70-03	5, SB	Fish consumption advisory Supports: aquatic life use Non-Support: fish consumption Partial Support: primary contact recreation, secondary contact recreation, aesthetics Water Impairment: priority organics, pathogens, turbidity, suspended solids, trash and debris Source: combined sewer overflow
Hingham Bay (vicinity of Nut Island Treatment Plant)	2002	MA70-06_00	MA70-06	5, SB	Fish consumption advisory Supports: aquatic life use, primary contact recreation, secondary contact recreation, aesthetics Not Assessed: fish consumption Water Impairment: pathogens Source: none listed

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category & Class	Water Quality Attainment Status for State Designated Uses & Impairment
Hingham Bay (includes areas between Peddocks Is to Windmill Pt, to Bumpkin Is, Bumpkin Is to Sunset Pt to Worlds End; Worlds End to Crow Pt; Beach In to Lower Neck to mouth of Weymouth River)	2002	MA70-07_00	MA70-07	5, SB	Fish consumption advisory Fully Supports: aquatic life use, primary contact recreation, secondary contact recreation, aesthetics Not Assessed: fish consumption Water Impairment: pathogens Source: none listed
Hingham Harbor (Hingham Harbor inside a line from Crows Pt to Worlds End)	2002	MA70-08_00	MA70-08	5, SB	Fish consumption advisory Not Assessed: aquatic life use, fish consumption, primary contact recreation, secondary contact recreation, aesthetics Water Impairment: pathogens Source: none listed
Hull Bay (E of a line from Windmill Pt to Bumpkin Is, and from Bumpkin Is to Sunset Pt)	2002	MA70-09_00	MA70-09	5, SB	Fish consumption advisory Not Assessed: aquatic life use, fish consumption, primary contact recreation, secondary contact recreation, aesthetics Water Impairment: pathogens Source: none listed
Quincy Bay (from Broomfield St. near Wallaston Yacht Club, N to buoy C"1", SE to Lord's Pt on the N shore of Hough's neck)	2002	MA70-04_00	MA70-04	5, SB	Fish consumption advisory Supports: aquatic life use, primary contact recreation, secondary contact recreation, aesthetics Non-Support: fish consumption Water Impairment: priority organics, pathogens Source: unknown

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category & Class	Water Quality Attainment Status for State Designated Uses & Impairment
Quincy Bay (N of class SA waters to Moon Head and Nut Is)	2002	MA70-05_00	MA70-05	5, SB	Fish consumption advisory Supports: aquatic life use Non-Support: fish consumption, primary contact recreation, secondary contact recreation Not Assessed: aesthetics Water Impairment: priority organics, pathogens Source: urban runoff/storm sewers, municipal point source

**Fish consumption advisory:** In July 2001 the Massachusetts Department of Public Health (MDPH 2001) issued new statewide consumer advisories on fish (marine and freshwater) consumption due to mercury contamination. Because of the statewide advisory waters within the Charles watershed <u>cannot</u> be assessed as **Support** or **Partial Support** for the designated use category of *Fish Consumption*.

#### Website addresses:

EPA Water Quality Inventory 305(b) website: <a href="http://www.epa.gov/waters/305b/index.html">http://www.epa.gov/waters/305b/index.html</a>

EPA TMDL 303(d) Reports: http://www.epa.gov/waters/tmdl/index.html

Boston Harbor 1999 Water Quality Assessment Report: <a href="http://www.state.ma.us/dep/brp/wm/wqassess.htm">http://www.state.ma.us/dep/brp/wm/wqassess.htm</a>

Table 5. Water Quality Attainment Status for State Designated Uses [305(b) waters] and Impaired Waters [303(d) listed] for Cape Cod National Seashore. Information is a summary from EPA Water Quality Inventory 305(b), EPA TMDL 303(d) Reports, and the Cape Cod Watershed Water Quality Assessment Report (MA-DEP 2002b) (most current information), and the Massachusetts Year 2002 Integrated List of Waters (Commonwealth of Massachusetts 2002) (most current information). None of these water bodies had TMDL's reported to EPA by Massachusetts. CCB: MA Department of Marine Fisheries (DMF) classification areas codes for shellfishing areas, Shellfish Status Report, July 2000.

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category & Class	Water Quality Attainment Status for State Designated Uses & Impairment
Chatham Harbor (lower Pleasant Bay) (N tip of Strong Is to CACO, S tip of Strong Is S to Allen Pt, including waters from Amos Pt SE to CACO)	2002	MA96-10	MA96-10	2, SA	Fish consumption advisory Support: primary contact recreation, secondary contact recreation, shellfishing Not Assessed: aquatic life use, fish consumption, aesthetics Water Impairments: none Source: none
Clapps Pond	2002	MA96-035	MA96-035	3, B	Fish consumption advisory Not Assessed: aquatic life use, fish consumption, secondary contact recreation, aesthetics Water Impairments: not assessed Source: not assessed
Duck Creek (Cannon Hill to Shirttail Pt)	2002	MA96-32	MA96-32	5, SA	Fish consumption advisory Support: primary contact recreation, secondary contact recreation, shellfishing (area CCB13.0) Partial Support: shellfishing (area CCB13.2 & CCB13.3) Non-Support: shellfishing (area CCB13.1) Not Assessed: aquatic life use, fish consumption, aesthetics Water Impairments: pathogens Source: non listed

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category & Class	Water Quality Attainment Status for State Designated Uses & Impairment
Great Pond (Truro)	2002	MA96-114	MA96-114	3, B	Fish consumption advisory Not Assessed: aquatic life use, fish consumption, secondary contact recreation, aesthetics Water Impairments: not assessed Source: not assessed
Gull Pond	2002	MA96-123	MA96-123	3, B	Fish consumption advisory Not Assessed: aquatic life use, fish consumption, secondary contact recreation, aesthetics Water Impairments: not assessed Source: not assessed
Herring Pond (Eastham)	2002	MA96-133	MA96-133	3, B	Fish consumption advisory Not Assessed: aquatic life use, fish consumption, secondary contact recreation, aesthetics Water Impairments: not assessed Source: not assessed
Herring River (Griffin Is to Wellfleet Harbor)	2002	MA96-33	MA96-33	5, SA	Fish consumption advisory Support: primary contact recreation, secondary contact recreation Partial Support: shellfishing (areas CCB12.1 & CCB12.2) Non-Support: shellfishing (areas CCB12.4 & CCB12.5) Not Assessed: aquatic life use, fish consumption, aesthetics Water Impairments: pathogens Source: none listed
Long Pond (Wellfleet)	2002	MA96-179	MA96-179	3, B	Fish consumption advisory  Not Assessed: aquatic life use, fish consumption, secondary contact recreation, aesthetics  Water Impairments: not assessed  Source: not assessed

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category & Class	Water Quality Attainment Status for State Designated Uses & Impairment
Nauset Harbor (E from Woods Cove around S point of Stony Is, around S point of unnamed island in harbor to CACO)	2002	MA96-28	MA96-28	2, SA	Fish consumption advisory Support: primary contact recreation, secondary contact recreation, shellfishing Not Assessed: aquatic life use, fish consumption, aesthetics Water Impairments: none Source: none listed
Pamet River (Rt 6 to mouth at Cape Cod Bay, including Pamet Harbor)	2002	MA96-31	MA96-31	5, SA	Fish consumption advisory Support: primary contact recreation, secondary contact recreation Partial Support: shellfishing (areas CCB7.1 & CCB 7.2) Non-Support: shellfishing (areas CCB7.3) Not Assessed: aquatic life use, fish consumption, aesthetics Water Impairments: pathogens Source: none listed
Provincetown Harbor (NW from tip of Long Pt to Beach Pt beach)	2002	MA96-29	MA96-29	5, SA	Fish consumption advisory Support: primary contact recreation, secondary contact recreation, shellfishing (areas: CCB4.0, CCB4.20, CCB5.0) Partial Support: shellfishing (areas CCB4.2, CCB4.4) Non-Support: shellfishing (areas CCB4.1, CCB4.3, CCB5.1) Not Assessed: aquatic life use, fish consumption, aesthetics Water Impairments: pathogens Source: none listed
Ryder Pond (Truro)	2002	MA96-268	MA96-268	5, B	Fish consumption advisory Support: aquatic life use, secondary contact recreation, aesthetics Not Assessed: fish consumption, primary contact recreation Water Impairments: nutrients, organic enrichment/low dissolved oxygen Source: none listed

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category & Class	Water Quality Attainment Status for State Designated Uses & Impairment
Wellfleet Harbor (waters north of an imaginary line drawn W from Jeremy Pt to Sunken Meadow, excluding Herring River, Duck Creek, & Blackfish Creek)	2002	MA96-34	MA96-34	5, SA	Fish consumption advisory Support: primary contact recreation (7.25 mi), secondary contact recreation (7.25 mi), shellfishing (areas CCB11.0, CCB13.0, CCB14.0) Non-Support: shellfishing (area CCB10.0) Not Assessed: aquatic life use, fish consumption, primary contact recreation (0.02 mi), secondary contact recreation (0.02 mi), aesthetics Water Impairments: pathogens Source: none listed

**Fish consumption advisory:** Estuaries and coastal embayments in the Cape Cod watershed have not yet been assessed for *Fish Consumption* use. However, in July 2001 the Massachusetts Department of Public Health (MDPH 2001) issued new statewide consumer advisories on fish (marine and freshwater) consumption due to mercury contamination. Currently there are no MDPH-issued fish consumption advisories for any estuaries or coastal embayments in the Cape Cod watershed, however, because of the statewide advisory waters within the Cape Cod watershed <u>cannot</u> be assessed as Support or Partial Support for the designated use category of *Fish Consumption*.

Note: Ryder pond was assessed in 1999 for a TMDL.

Website addresses:

EPA Water Quality Inventory 305(b) website: <a href="http://www.epa.gov/waters/305b/index.html">http://www.epa.gov/waters/305b/index.html</a>

EPA TMDL 303(d) Reports: <a href="http://www.epa.gov/waters/tmdl/index.html">http://www.epa.gov/waters/tmdl/index.html</a>

Cape Cod Watershed Water Quality Assessment Report <a href="http://www.state.ma.us/dep/brp/wm/wqassess.htm">http://www.state.ma.us/dep/brp/wm/wqassess.htm</a>

Table 6. Water Quality Attainment Status for State Designated Uses [305(b) waters] and Impaired Waters [303(d) listed] for Colonial National Historical Park. Percentages indicate percent of water body (from 305(b) listing) that is impaired. Information is a summary from EPA Water Quality Inventory 305(b), EPA TMDL 303(d) Reports, and 2002 Virginia Department of Environmental Quality 303(d) Report. If a 305(b) ID is not listed then the corresponding 305(b) report for that segment of the water body could not be found. None of these water bodies had TMDL's reported to EPA by Virginia. VDH: Virginia Department of Health. "na" indicates information could not be found.

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category	Water Quality Attainment Status for State Designated Uses & Impairment
Baptist Run	2000	VAT-G11R_BAP01A00	Not listed	2a	Fully supports: aquatic life, fish consumption, primary contact recreation.  Not assessed: drinking water supply & shellfishing Water Impairment: not 303(d) listed  Source: not 303(d) listed
Cheatham Pond	2000	VAT-F26L_06	Not listed	2a	Fully supports: aquatic life, fish consumption, & primary contact recreation.  Water Impairment: not 303(d) listed  Source: not 303(d) listed
College Creek	2000	VAT-G10E_CLG01A00	Not Listed	2a	Fully supports: aquatic life, fish consumption, & primary contact recreation.  Not Assessed: shellfishing, & drinking water supply Water Impairment: not 303(d) listed  Source: not 303(d) listed
Felgate's Creek	2000	VAT-F27E_FEL01A00	VAT-F26E_SF_A	5	Fully supports: aquatic life, fish consumption, & primary contact recreation.  Partially supports: shellfishing (100%)  Not Assessed: drinking water supply  Water Impairments: pathogens, VDH shellfish restriction  Source: non-point source

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category	Water Quality Attainment Status for State Designated Uses & Impairment
Indian Field Creek	2002	Not listed	VAT- F27E_IFC01A00	5	Attainment status not found Water impairments: VDH shellfish restriction Source: unknown
James River	1998	Not listed	VAT-G10E-04	5	Partially supports: aquatic life Water Impairments: nutrients Source: unknown
Jones Mill Pond	2000	VAT-F26L_05	Not Listed	2a	Fully supports: aquatic life, fish consumption, drinking water, & primary contact recreation.  Water Impairment: not 303(d) listed  Source: not 303(d) listed
King Creek (estuary)	1998	VAT-F27E_KNG01A00	VAT-F27E_SF_B VAT-F27E_SF_C	5	Fully supports: fish consumption Partially supports: aquatic life support (100%), shellfishing (100%), & primary contact recreation (100%) Not assessed: drinking water supply Water Impairments: organic enrichment/low dissolved oxygen, pathogens, VDH shellfish restriction Source: natural sources, non-point sources
King Creek (at Colonial Parkway Crossing, river mile 3.96 to 4.96)	1998	Not listed	VAT-F27E_A VAT-F27E_07 (segment ID)	na	Partially supports: aquatic life support, & primary contact recreation  Water Impairments: fecal coliform, dissolved oxygen Source: Natural conditions & unknown
King Creek (river mile mouth to 0.68 miles)	1998	Not listed	VAT-F27E-08 (segment ID)	na	Partially supports: fish consumption Impairment: fish tissue PCBs Source: unknown, may be related to sediment PCBs in Queen Creek sediments

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category	Water Quality Attainment Status for State Designated Uses & Impairment
Mill Creek Segment begins at the end of tidal influence and extends to the confluence with the James River	2000	VAT-G10E_MIC01A00	VAT-G10E-03 (segment ID)	5	Fully supports: aquatic life support, fish consumption Partially supports: primary contact recreation (100%) Not assessed: drinking water supply & shellfishing Impairment: Fecal coliform Source: unknown
Powhatan Creek Segment extends from estuarine transition to confluence with Long Hill Swamp	2000	VAT-G10R_POW01A00	VAT-G10R-02	5	Fully supports: fish consumption, & primary contact recreation  Partially supports: aquatic life support  Not assessed: drinking water supply & shellfishing  Impairment: General standard (benthic)  Source: unknown
Powhatan Creek Rt 31 bridge to confluence with Sandy Bay	2000	VAT-G10E_POW01A00	VAT-G10E-02 VAT-G10E-01	5	Fully supports: aquatic life support & fish consumption Partially supports: primary contact recreation (100%) Not assessed: drinking water supply & shellfishing Water Impairments: fecal coliform, pathogens Source: unknown
Queen's Creek (headwaters of creek to confluence with York River)	1998, 2000	VAT-F26E_QEN01A00	VAT-F26E VAT- F26E_QEN01A00 (Segment ID) VAT-F26E-11 (Segment ID)	5	Fully supports: fish consumption  Partially supports: Aquatic life support (100%) & shellfishing (100%), primary contact recreation  Not assessed: drinking water supply  Water Impairments: organic enrichment/low dissolved oxygen, fecal coliform, pathogens, sediment PCBs, VDH shellfish restriction  Source: unknown & natural sources

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category	Water Quality Attainment Status for State Designated Uses & Impairment
Queen's Creek (at confluence with York River)	2000	VAT-F26E_QEN01B00	VAT-F26E_SF_H	na	Fully supports: fish consumption Partially supports: shellfishing (100%) Threatened: aquatic life support Not supporting: primary contact recreation (100%) Not assessed: drinking water supply Water Impairments: PCB's, sedimentation/siltation, & pathogens, VDH shellfish restriction Source: unknown, natural sources, & non-point source
Roosevelt Pond	2000	VAT-F27L_05	Not listed	2a	Fully supports: aquatic life, fish consumption, & primary contact recreation.  Water Impairment: not 303(d) listed  Source: not 303(d) listed
York River	2002	This reach not listed	VAT-F27E_18	5	Not supporting: aquatic life support Water impairments: General standard (benthic) Source: unknown
York River	2000	VAT-F27E_YRK01A00	VAT-F27E_03 VAT-F26E_01	5	Fully supports: fish consumption, shellfishing, & primary contact recreation.  Partially supports: aquatic life support (100%)  Not assessed: Drinking water supply  Water impairments: organic enrichment/low dissolved oxygen, nutrients  Source: natural & unknown sources

EPA Water Quality Inventory 305(b) website: <a href="http://www.epa.gov/waters/305b/index.html">http://www.epa.gov/waters/305b/index.html</a>

EPA TMDL 303(d) Reports: http://www.epa.gov/waters/tmdl/index.html

Virginia Department of Environmental Quality 2002 303(d) Report: <a href="http://www.deq.state.va.us/water/303d.html">http://www.deq.state.va.us/water/303d.html</a>

Table 7. Water Quality Attainment Status for State Designated Uses [305(b) waters] and Impaired Waters [303(d) listed] for Fire Island National Seashore. Percentages indicate percent of water body (from 305(b) listing) that is impaired. Information is a summary from EPA Water Quality Inventory 305(b), EPA TMDL 303(d) Reports, 2000 New York State Water Quality 305(b) Report (which also lists the 1998 303(d) list), and the New York 2002 303(d) List. New York has not submitted detailed electronic water quality assessment data in standard format to EPA at this time therefore 305(b) Assessment Unit IDs are not available at this time. In 2002, New York State subdivided larger bodies of water into smaller areas (e.g. Great South Bay was subdivided into individual bays such as Narrow Bay, Bellport Bay, Patchogue Bay, etc.). "na" indicates information could not be found.

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category or Class	Water Quality Attainment Status for State Designated Uses & Impairment
Great South Bay (West)	2000	Not listed	NY-1700173	na, SA	Precluded: Shellfishing Water Impairment: Pathogens Source: urban runoff
Great South Bay (Central)	2000	Not listed	NY-17010040	na, SA	Precluded: Shellfishing Water Impairment: Pathogens Source: urban runoff
Great South Bay (East)	2000	Not listed	NY-17010039	na, SA	Precluded: Shellfishing Water Impairment: Pathogens Source: urban runoff
Moriches Bay	2000	Not listed	NY-17010038	na, SA	Precluded: Shellfishing Water Impairment: Pathogens Source: storm sewers
South Oyster Bay	2002	Not listed	NY-17010041	na, SA	Precluded: Shellfishing Water Impairment: Pathogens Source: urban & storm runoff
Forge River	2002	Not listed	NY-1701-0316	na, SA	Impaired: Shellfishing Water Impairment: Pathogens Source: urban/storm runoff, agriculture

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category or Class	Water Quality Attainment Status for State Designated Uses & Impairment
Narrow Bay	2002	Not listed	NY-1701-0318	na, SA	Impaired: Shellfishing Water Impairment: Pathogens Source: urban/storm runoff, agriculture
Bellport Bay	2002	Not listed	NY-1701-0320	na, SA	Impaired: Shellfishing Water Impairment: Pathogens Source: urban/storm runoff
Patchogue Bay	2002	Not listed	NY-1701-0326	na, SA	Impaired: Shellfishing Water Impairment: Pathogens Source: urban/storm runoff
Nicoll Bay	2002	Not listed	NY-1701-0375	na, SA	Impaired: Shellfishing Water Impairment: Pathogens Source: urban/storm runoff

EPA Water Quality Inventory 305(b) website: <a href="http://www.epa.gov/waters/305b/index.html">http://www.epa.gov/waters/305b/index.html</a>

EPA TMDL 303(d) Reports: <a href="http://www.epa.gov/waters/tmdl/index.html">http://www.epa.gov/waters/tmdl/index.html</a>
2000 New York State Water Quality Report (which also lists the 1998 303(d) list: <a href="http://www.dec.state.ny.us/website/dow/305b00.pdf">http://www.dec.state.ny.us/website/dow/305b00.pdf</a>

New York 2002 303(d) List: <a href="http://www.dec.state.ny.us/website/dow/303dlist.pdf">http://www.dec.state.ny.us/website/dow/303dlist.pdf</a>

Table 8. Water Quality Attainment Status for State Designated Uses [305(b) waters] and Impaired Waters [303(d) listed] for Gateway National Recreation Area. Percentages indicate percent of water body (from 305(b) listing) that is impaired. Information is a summary from EPA Water Quality Inventory 305(b), EPA TMDL 303(d) Reports, 2000 New York State Water Quality 305(b) Report (which also lists the 1998 303(d) list), and the New York 2002 303(d) List. New York and New Jersey have not submitted detailed electronic water quality assessment data in standard format to EPA at this time therefore 305(b) Assessment Unit IDs are not available at this time. "na" indicates information could not be found.

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category or Class	Water Quality Attainment Status for State Designated Uses & Impairment
Atlantic Ocean (Kings Cty)	2000	Not listed	NY-1701-0014	na, SA	Precluded: Shellfishing Water Impairment: pathogens Source: combined sewer overflow
Atlantic Ocean (Sandy Hook Unit)	Not listed	Not listed	Not listed	na, SC	Not listed
Bergen Basin	2002	Not listed	NY-1701-0009	na, I	Impaired: fish propagation Water Impairment: Organic enrichment, low dissolved oxygen, pathogens, nitrogen Source: combined sewer overflow, urban runoff, & municipal wastewater discharge
Coney Island Creek	2002	Not listed	NY-1701-0008	na, I	Precluded: fish propagation Water Impairment: low dissolved oxygen, pathogens, organic enrichment Source: combined sewer overflow, urban runoff, onsite wastewater treatment system
East Rockway Inlet	2002	Not listed	NY-1701-0217	na	Impaired: Shellfishing Water Impairment: pathogens Source: urban/storm runoff

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category or Class	Water Quality Attainment Status for State Designated Uses & Impairment
Jamaica Bay	2002	Not listed	NY-1701-0005	na, SB	Precluded: bathing Water Impairment: pathogens, nitrogen, oxygen demand Source: combined sewer overflow, urban runoff, & municipal wastewater discharge
Lower New York Bay	2002	Not listed	NY-1701-0004	na, SB	Impaired: Fish consumption (migratory species) Water Impairment: pathogens, PCBs Source: combined sewer overflow
Mill Basin	2002	Not listed	NY-1701-0178	na, SB	Impaired: bathing Water Impairment: Organic enrichment, low dissolved oxygen, pathogens, nitrogen Source: storm sewers, urban/storm runoff, combined sewer overflow, private systems
Paerdegat Basin	2002	Not listed	NY-1701-0003	na, I	Precluded: fish propagation Water Impairment: low dissolved oxygen, organic enrichment Source: combined sewer overflow, urban/storm runoff
Ridders Pond	2002	Not listed	NY-1701-0176	na, C	Impaired: fish consumption Water Impairment: pesticides, chlordane Source: urban runoff, contaminated sediment
Sandy Hook Bay	1998	Not listed	NJ-12CA- Sandy_Hook_Bay	na, SE1	Impaired: Shellfish consumption Water Impairment: fecal coliform Source: none listed
Sandy Hook Bay Reach	2002	Not listed	NJ-02030104-006	5, SE1	Impaired: Aquatic life support Water Impairment: arsenic, copper, mercury, silver, & zinc (Lead & nickel removed from 2002 list due to new assessment method). Source: none listed

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category or Class	Water Quality Attainment Status for State Designated Uses & Impairment
Sandy Hook Bay	2002	Not listed	914, 918, 908, 906A (NJ Site ID)	1&2, SE1	Attainment status not found Water Impairment: fecal coliform, dissolved oxygen, chromium, copper, lead, mercury Source: none listed
Shellbank Basin	2002	Not listed	NY-1701-0001	na, I	Precluded: fish propagation Water Impairment: Organic enrichment/ low dissolved oxygen, Nitrogen Source: combined sewer overflow & urban/storm runoff

EPA Water Quality Inventory 305(b) website: <a href="http://www.epa.gov/waters/305b/index.html">http://www.epa.gov/waters/305b/index.html</a>

EPA TMDL 303(d) Reports: http://www.epa.gov/waters/tmdl/index.html

2000 New York State Water Quality Report, which also lists the 1998 303(d) list: http://www.dec.state.ny.us/website/dow/305b00.pdf

New York 2002 303(d) List: http://www.dec.state.ny.us/website/dow/303dlist.pdf

New Jersey 1998 303(d) List: <a href="http://www.state.nj.us/dep/dsr/watershed/integratedlist/integratedlist.pdf">http://www.state.nj.us/dep/dsr/watershed/integratedlist/integratedlist.pdf</a>

Table 9. Water Quality Attainment Status for State Designated Uses [305(b) waters] and Impaired Waters [303(d) listed] for George Washington Birthplace National Monument. Percentages indicate percent of water body (from 305(b) listing) that is impaired. Information is a summary from EPA Water Quality Inventory 305(b), EPA TMDL 303(d) Reports, 2002 Virginia Department of Environmental Quality 303(d) Report, and Maryland 303(d) Report. If a 305(b) ID is not listed then the corresponding 305(b) report for that segment of the water body could not be found. None of these waterbodies had TMDL's reported to EPA by Virginia. VDH: Virginia Department of Health.

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category	Water Quality Attainment Status for State Designated Uses & Impairment
Popes Creek (Tidal limit to mouth of Potomac River)	2000	VAP- A31E_POP01A98	VAP-A31E_SF_E VAP-A31E-07 (Segment ID)	5	Fully supports: aquatic life, fish consumption Partially supports: shellfishing (100%), primary contact recreation. Water Impairment: fecal coliform, pathogens, VDH shellfish restriction Source: nonpoint & unknown sources
Popes Creek (Stream/Creek/River)	2000	VAP- A31R_POP01A00	Not listed	2	Fully supports: aquatic life, fish consumption Not assessed: primary contact recreation. Water Impairment: not 303(d) listed Source: not 303(d) listed
Potomac River/ Lower Potomac River Smith Point to mouth (tidal)	2002	MD-02140101-E-1_00 MD-02140101-E-1_01	MD-0103-02140101 MD-0015_021401	na	Shellfishing: Portion of River is restricted (<0.76 sq mi) and conditionally approved (2.58 sq mi) due to wastewater discharge safety zone (not a water impairment), and nonpoint runoff Fish consumption advisory Partially supports: fish, shellfish, and wildlife protection and propagation (100%). Water Impairment: organic enrichment/low dissolved oxygen, suspended sediment, pathogens,

nutrients, toxics (PCBs)

Source: eutrophication, natural sources, & non-point sources

**Fish consumption advisory:** Advisory issued in April 1999 for PCBs in channel catfish, American eel, and carp in the Lower Potomac River. Source of PCB's probably are residues from disposal of electrical transformers, although no specific source is identified (MD-DNR 2000).

Website addresses:

EPA Water Quality Inventory 305(b) website: <a href="http://www.epa.gov/waters/305b/index.html">http://www.epa.gov/waters/305b/index.html</a>

EPA TMDL 303(d) Reports: http://www.epa.gov/waters/tmdl/index.html

Virginia Department of Environmental Quality 2002 303(d) Report: http://www.deq.state.va.us/water/303d.html

Maryland's 2002 303(d) List: http://www.mde.state.md.us/Programs/WaterPrograms/TMDL/Maryland%20303%20dlist/index.asp

Maryland's 2000 305(b) Report: http://dnrweb.dnr.state.md.us/download/bays/MD2000\_305b.pdf

Table 10. Water Quality Attainment Status for State Designated Uses [305(b) waters] and Impaired Waters [303(d) listed] for Sagamore Hill National Historic Site. Percentages indicate percent of water body (from 305(b) listing) that is impaired. Information is a summary from EPA Water Quality Inventory 305(b), EPA TMDL 303(d) Reports, 2000 New York State Water Quality 305(b) Report (which also lists the 1998 303(d) list), and the New York 2002 303(d) List. New York has not submitted detailed electronic water quality assessment data in standard format to EPA at this time therefore 305(b) Assessment Unit IDs are not available at this time. "na" indicates information could not be found.

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category or Class	Water Quality Attainment Status for State Designated Uses & Impairment
Oyster Bay Harbor	2002	Not listed	NY-1702-0016	na, SA	Precluded: shellfishing, fish consumption Water Impairment: pathogens, PCBs in migratory species, Source: urban & storm runoff
Cold Spring Harbor	2002	Not listed	NY-1702-0018	na, SA	Precluded: shellfishing, fish consumption Water Impairment: pathogens, PCBs in migratory species, Source: urban & storm runoff

#### Website addresses:

EPA Water Quality Inventory 305(b) website: <a href="http://www.epa.gov/waters/305b/index.html">http://www.epa.gov/waters/305b/index.html</a>

EPA TMDL 303(d) Reports: <a href="http://www.epa.gov/waters/tmdl/index.html">http://www.epa.gov/waters/tmdl/index.html</a>

 $2000 \ New \ York \ State \ Water \ Quality \ Report \ (which \ also \ lists \ the \ 1998 \ 303 (d) \ list: \ http://www.dec.state.ny.us/website/dow/305b00.pdf$ 

New York 2002 303(d) List: <a href="http://www.dec.state.ny.us/website/dow/303dlist.pdf">http://www.dec.state.ny.us/website/dow/303dlist.pdf</a>

Table 11. Water Quality Attainment Status for State Designated Uses [305(b) waters] and Impaired Waters [303(d) listed] for Thomas Stone National Historic Park. Percentages indicate percent of water body (from 305(b) listing) that is impaired. Information is a summary from EPA Water Quality Inventory 305(b), EPA TMDL 303(d) Reports, and Maryland 303(d) Report. If a 305(b) ID is not listed than the corresponding 305(b) report for that segment of the water body could not be found. \* A TMDL for nitrogen and phosphorus was approved by the EPA on 3/18/99 for this waterbody.

Waterbody	Listing Cycle	305 b Assessment Unit ID	303(d) List ID	Integrated List Category	Water Quality Attainment Status for State Designated Uses & Impairment
Port Tobacco River	2000	MD-02140109-R-1_0773	Not Listed	na	Fully Supporting: Fish, shellfish, and wildlife protection and propagation.  Water Impairment: nutrients Source: Point, non-point, and natural
Port Tobacco River (tidal) *	2002	MD-02140109-R-1_00	MD-0111-02140109	na	Partially Supporting: Fish, shellfish, and wildlife protection and propagation (100%).  Water Impairment: nutrients (nitrogen & phosphorus), suspended sediment  Source: Municipal point sources, non-point source, agriculture, urban runoff/storm sewers

EPA Water Quality Inventory 305(b) website: http://www.epa.gov/waters/305b/index.html

EPA TMDL 303(d) Reports: <a href="http://www.epa.gov/waters/tmdl/index.html">http://www.epa.gov/waters/tmdl/index.html</a>

 $Maryland "s~2002~303 (d)~List: \\ \underline{http://www.mde.state.md.us/Programs/WaterPrograms/TMDL/Maryland "s~20303 \% 20 \\ \underline{dlist/index.asp}$ 

Maryland's 2000 305(b) Report: http://dnrweb.dnr.state.md.us/download/bays/MD2000 305b.pdf

#### **OUTSTANDING RESOURCE WATERS**

The Outstanding National Resource Waters (ONWR or Tier 3 waters), provision in the Clean Water Act provides that "where high quality waters constitute an outstanding National resource, such as waters of National Parks, State parks and wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected." States may allow some limited activities which result in temporary and short-term changes in water quality, but such changes in water quality should not impact existing uses or alter the essential character or special use that makes the water an ONWR (EPA 1994). While ONWRs are often regarded as having the highest water quality, this is not a requirement. Waters that are of exceptional recreational and/or ecological significance need not have particularly high water quality to be provided status as an ONWR. ONWR designation of a water body provides the maximum protection to water quality under the Clean water Act and insures that no permanent degradation of water quality will occur.

#### **Acadia National Park:**

Outstanding Resource Waters are classified by the Maine Department of Environmental Protections as Class SA waters (estuarine and marine), Class GPA (lakes), and Class AA (riverine) (ME-DEP 2002b).

- All brooks, streams and segments of those brooks and streams that are within the boundaries of Acadia National Park (Class AA).
- Bar Harbor (state ID: 714-6): Tidal waters, except those lying within 500 feet of privately owned shoreline, lying northerly of latitude 44'- 16'-36" N., southerly of latitude 44'- 20'-27" N., and westerly of longitude 68'- 09'-28" W. (Class SA)
- Cranberry Isles(state ID: 714-2): Tidal waters, except those lying within 500 feet of privately owned shoreline, lying within 0.5 mile of the shore of Baker Island. (Class SA)
- Mount Desert (state ID: 714-3): Tidal waters, except those lying within 500 feet of privately owned shoreline, lying northerly of latitude 44'- 16'-36" N. and easterly of longitude 68'-13'-08" W. (Class SA)
- Mount Desert (state ID: 714-3): Tidal waters of Somes Sound lying northerly of a line beginning at a point located at the Acadia National Park boundary at latitude 44'-1818" N., longitude 68'-18-42" W. and running northeasterly to a point located at the Acadia National Park boundary at latitude 44'-18'-54" N., longitude 68'-18'-22" W., except those waters of Broad Cove lying west of a line running from the point of land immediately south of the cove northerly to Navigation Can #7 and those waters lying within 500 feet of overboard discharges licensed as of January 1, 1999. (Class SA)

Mount Desert coastal lakes (Class GPA)

- Otter Cover, Bar Harbor (state ID: 714-5) (Class SA)
- Somes Sound (state ID: 714-3): Tidal waters of Somes Sound lying within 500 feet of overboard discharges licensed as of January 1, 1999. (Class SA)
- Southwest Harbor (state ID: 714-1): Tidal waters lying northerly of latitude 44'-12'-44' "N., southerly of latitude 44' 14'-13" N. and westerly of longitude 68'-18'-27" W. (Class SA)
- Southwest Harbor (state ID: 714-1):: Tidal waters of Somes Sound lying northerly of a line beginning at a point located at the Acadia National Park boundary at latitude 44'-18'-18" N., longitude 68' 18'-42" W. and running northeasterly to a point located at the Acadia National Park boundary at latitude 44'-18'-54" N., longitude 68' 18'-22" W. (Class SA)
- Tremont: Tidal waters lying northerly of latitude 44' -12'-44' -" N., southerly of latitude 44' -14'-13" N. and easterly of longitude 68' 20'-30" W. (Class SA)
- Winter Harbor (state ID: 714-17):: Tidal waters lying south of a line running west from the northernmost tip of Frazer Point to longitude 68'-05'-00" W. and east of longitude 68'-05'-00" W. (Class SA)

### **Assateague Island National Seashore:**

Information on Outstanding Resource Waters could not be found for the state of Maryland.

## **Boston Harbor Islands National Park Area:**

The state of Massachusetts classified outstanding resource waters as Class A. There are no Class A within BOHA

### **Cape Cod National Seashore:**

Waters in and adjacent (Area within 1,000 feet seaward of mean low water) to Cape Cod National Seashore have been classified as Outstanding Resource Waters (MA-DEP 2002b).

- Herring River (Listing ID MA96-33): Designated as an Outstanding Resource Water (MA-DEP 2002b).
- Herring Pond (Listing ID MA96-133): Designated as an Outstanding Resource Water, special designation Class B, Warm Water Fisheries (MA-DEP 2002b).
- Pleasant Bay: approximately 9,050 acres, is designated as and Area of Critical Environmental Concern (ACEC) (MA-DEM 2002):
  - "Pleasant Bay possesses outstanding natural resources on a regional and statewide level, including well-preserved and largely unaltered barrier beaches

and islands, approximately 1200 acres of saltmarsh, and thousands of acres of tidal flats, numerous fresh and saltwater ponds, and a significant estuarine habitat. The barrier beaches also provide storm damage prevention.

Despite recent rapid growth and development in the area, most of the marshes and tidal flats have not yet experienced significant degradation from this activity. Because of this relatively unaltered state of the resources, the marshes, barrier beaches, and tidal flats can function at their maximum capacity as habitat areas, and nursery and spawning grounds. There are four anadromous fish runs and extensive shellfish beds. The 7000-acre estuary is a highly popular sportfishing area. Twelve threatened or endangered species occur within the Pleasant Bay area, with 16 more species listed as "special concern" in Massachusetts. Bird watchers have listed 248 species of birds annually.

Pleasant Bay is extremely important as a transitional area between two biogeographic provinces. As such, the biological communities of the Bay contain some species at their most northerly range and others at their most southerly range. This wealth of biodiversity and the sensitivity of the organisms living at the extent of their ranges requires greater protection for such a unique resource area."

Wellfleet Harbor: approximately 12,350 acres, is designated as and Area of Critical Environmental Concern (ACEC) (MA-DEM 2002):

"Wellfleet Harbor is characterized by well-preserved and largely unaltered barrier beaches, islands, fresh and salt marshes, tidal flats, salt ponds, rivers, bays, and tidal creeks. Because of the high quality of the resources, the marshes, tidal flats, and barrier beaches function at their maximum capacity as habitat areas, nursery and spawning areas, and, in the case of barrier beaches, for the purposes of storm damage prevention. Nearly all of the shoreline is subject to erosion and some parts are listed as "critical erosion" areas by the Massachusetts Coastal Zone Management Program.

The productivity of the system is exceptional, particularly for shellfish. The relatively high quality tributaries and headwaters provide spawning sites for anadromous fishes. Over half of the area of the ACEC lies within the estimated habitat of state-listed rare wetland wildlife species.

Portions of the area have been designated by the Department of Environmental Management as containing visual landscapes and cultural resources that place it in the top 5% of all landscapes in the Commonwealth. Many recreational and scenic sites abound within the area, with a significant portion belonging to the Cape Cod National Seashore and to the Massachusetts Audubon Society. Lesser known features such as the kettle ponds at the headwaters of the Herring River are unique to the area. Unusual archaeological resources, such as a Native American burial site, and evidence of prehistoric habitation as early as the Middle Archaic Period (8000-6500 B.C.), are also found within the ACEC."

#### **Colonial National Historical Park:**

Virginia classifies Outstanding Resource Waters as Significant Lakes. There are no Significant Lakes within COLO.

**Fire Island National Seashore:** Information on Outstanding Resource Waters could not be found for the state of New York.

### **Gateway National Recreation Area:**

**Jamaica Bay Unit:** Information on Outstanding Resource Waters could not be found for the state of New York.

**Sandy Hook Unit:** New Jersey Classifies Outstanding Resource Waters as Class FW1 and PL. There are no Class FW1 or PL waters within the Sandy Hook Unit of GATE.

# **George Washington Birthplace:**

Virginia classifies Outstanding Resource Waters as Significant Lakes. There are no Significant Lakes within GEWA.

**Sagamore Hill National Historic Site:** Information on Outstanding Resource Waters could not be found for the state of New York.

#### Thomas Stone National Historic Park:

Information on Outstanding Resource Waters could not be found for the state of Maryland.

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